WEST Search History

DATE: Tuesday, September 30, 2003

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ			
L7	L5 and (LIF or leukemia inhibitory)	43	L7
L6	L5 and Nurr-1	9	L6
L5	L4 and (dopamine or dopaminergic)	117	L5
L4	L3 and neuron	179	L4
L3	L2 and (neurodegen$ or neurolog$ or parkinson)	235	L3
L2	L1 and (Nurr-1 or PTX3 or Phox 2a or AP2 or Shh)	752	L2
L1	transplant$ or implant$	295829	L1

END OF SEARCH HISTORY

9/30/03
AM

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Set	Items	Description
S1	2956423	(TRANSPLANT? OR IMPLANT? OR ENGRAFT?)
S2	511	S1 AND (NURR-1 OR PTX3 OR PHOX2A OR AP2 OR SHH)
S3	26	S2 AND NEURON
S4	22	RD (unique items)
S5	6	S4 AND (DOPAMINE OR DOPAMINERGIC)
S6	4	S5 AND (NEURODEGEN? OR NEUROLOG? OR PARKINSON)

?t 6/3,ab/1-4
>>>No matching display code(s) found in file(s): 65, 135

Dialog file: medicine 9/30/03 AM

6/3,AB/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

14309969 BIOSIS NO.: 200300303998
GENETIC ENGINEERING OF MOUSE EMBRYONIC STEM (ES) CELLS BY NURR 1 FACILITATES DIFFERENTIATION AND MATURATION INTO DOPAMINERGIC **(DA) NEURONS.**
AUTHOR: Chung S(a); Sonntag K-C; Andersson T(a); Bjorklund L; Park J J(a); Kang U; Isacson O; Kim K-S(a)
AUTHOR ADDRESS: (a)Molec Neurobiol Lab, McLean Hosp/Harvard Med School, Belmont, MA, USA**USA
JOURNAL: Society for Neuroscience Abstract Viewer and Itinerary Planner 2002pAbstract No 42910 2002
MEDIUM: cd-rom
CONFERENCE/MEETING: 32nd Annual Meeting of the Society for Neuroscience Orlando, Florida, USA November 02-07, 2002
SPONSOR: Society for Neuroscience
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Cell replacement therapy is a promising approach to treat **neurodegenerative** diseases, such as Parkinsons Disease (PD). The use of ES cells as a donor cell source for **transplantation** is favorable due to their developmental potency and expandability. Our previous studies showed that Nurr1-transduced ES cell clones contained a much larger number of TH+ neurons than nave ES cells after in vitro differentiation (Soc. Neurosci. Abst. 31:245.1). We further characterized the effect of Nurr1 on DA differentiation as follows; First, we examined the expression of midbrain DA makers after in vitro differentiation of ES cell by immunocytochemistry and/or RT-PCR analysis. Remarkably, exogenous Nurr1 expression resulted in up-regulation of all midbrain DA marker genes tested. Second, Nurr1-transduced neurons showed increased DA release in response to membrane depolarization. Third, generation of DA neurons from Nurr1-transduced ES cells was further increased after treatment with **Shh** , FGF8 and ascorbic acid (up-to >80% of all beta-tubulin +neurons). Finally, the numbers of beta-tubulin + neurons were not changed, suggesting that Nurr1 might be involved in specification and/or maintenance of the midbrain DA-specific phenotype. In summary, our study demonstrates an effective method of genetic modification of ES cells to induce the midbrain DA phenotype.

2002

6/3,AB/2 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

04177385 Genuine Article#: RL756 Number of References: 48
Title: INDUCTION OF MIDBRAIN DOPAMINERGIC **-NEURONS BY SONIC HEDGEHOG** (Abstract Available)
Author(s): HYNES M; PORTER JA; CHIANG C; CHANG D; TESSIERLAVIGNE M; BEACHY PA; ROSENTHAL A
Corporate Source: GENENTECH INC,DEPT NEUROSCI/S SAN FRANCISCO//CA/94080;

GENENTECH INC,DEPT NEUROSCI/S SAN FRANCISCO//CA/94080; JOHNS HOPKINS UNIV,SCH MED,HOWARD HUGHES MED INST,DEPT MOLEC BIOL & GENET/BALTIMORE//MD/21205; UNIV CALIF SAN FRANCISCO,HOWARD HUGHES MED INST,DEPT ANAT,CELL BIOL PROGRAM/SAN FRANCISCO//CA/94143; UNIV CALIF SAN FRANCISCO,HOWARD HUGHES MED INST,DEPT ANAT,PROGRAM DEV BIOL/SAN FRANCISCO//CA/94143; UNIV CALIF SAN FRANCISCO,HOWARD HUGHES MED INST,DEPT ANAT,PROGRAM NEUROSCI/SAN FRANCISCO//CA/94143

Journal: NEURON, 1995, V15, N1 (JUL), P35-44
ISSN: 0896-6273
Language: ENGLISH Document Type: ARTICLE

Abstract: Midbrain **dopaminergic** neurons, whose loss in adults results in **Parkinson** 's disease, can be specified during embryonic development by a contact-dependent signal from floor plate cells. Here we show that the aminoterminal product of Sonic hedgehog autoproteolysis (**SHH** -N), an inductive signal expressed by floor plate cells, can induce **dopaminergic** neurons in vitro. We show further that manipulations to increase the activity of cyclic AMP-dependent protein kinase A, which is known to antagonize hedgehog signaling, can block **dopaminergic neuron** induction by floor plate cells. Our results and those of other studies indicate that **SHH** -N can function in a dose-dependent manner to induce different cell types within the neural tube. Our results also provide the basis for a potential cell **transplantation** therapy for **Parkinson** 's disease.

6/3,AB/3 (Item 1 from file: 94)

05231199 JICST ACCESSION NUMBER: 02A0464498 FILE SEGMENT: JICST-E

Treatment of Parkinson **'s Disease by Using in Vitro-generated Neurons.**

KAWASAKI HIROSHI (1)
(1) Kyodai Saiseiikaken Saiseitogyogakubumon

Shinkei Chiryogaku(Neurological Therapeutics), 2002, VOL.19,NO.1, PAGE.51-56, FIG.3, TBL.1, REF.14
JOURNAL NUMBER: X0110ABA ISSN NO: 0916-8443
UNIVERSAL DECIMAL CLASSIFICATION: 616.83-08
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Commentary
MEDIA TYPE: Printed Publication

ABSTRACT: We identified a stromal cell-derived inducing activity (SDIA) that promotes neural differentiation of mouse embryonic stem (ES) cells. SDIA accumulated on the surface of PA6 stromal cells and induced efficient neuronal differentiation of ES cells in vitro. The majority of SDIA-induced ES cells were stained with either the neuronal marker class III .BETA.-tubulin or the neural precursor marker nestin after 8 day induction. A high proportion of tyrosine hydroxylase (TH)-positive neurons producing **dopamine** were obtained from SDIA-treated ES cells. TH neurons occupied 30% of TuJ-positive neurons, and this value was significantly higher than percentages of GABAergic, cholinergic and serotonergic neurons in TuJ-positive neurons. These TH-positive neurons were negative for **dopamine** -.BETA.-hydroxylase. Mesencephalic **dopaminergic neuron** markers Nurr1 and **Ptx3** were induced in SDIA-treated ES cells. SDIA-induced **dopaminergic** neurons were **implanted** into the mouse striatum, which had been treated with 6-hydroxydopamine (6-OHDA). Whereas 6-OHDA largely depleted **dopaminergic** projections in the nigro-striatal system, **implantation** of SDIA-induced neurons significantly restored TH-positive area in and around the graft. These results raised the possibility that SDIA-induced neurons may provide a noninvasive alternative to embryonal brain tissues for neuronal replacement therapy of **Parkinson** 's disease. Thus, in vitro neural induction by SDIA provides a new powerful tool for both basic neuro-science research and therapeutic applications. (author abst.)

6/3,AB/4 (Item 1 from file: 98)

04504736 H.W. WILSON RECORD NUMBER: BGSA01004736

Genetic models of obesity and energy balance in the mouse.

Robinson, Susan W
Dinulescu, Daniela M; Cone, Roger D

Annual Review of Genetics v. 34 (2000) p. 687-745
SPECIAL FEATURES: bibl il ISSN: 0066-4197
LANGUAGE: English
COUNTRY OF PUBLICATION: United States
WORD COUNT: 26310

ABSTRACT: Obesity is a health problem of epidemic proportions in the industrialized world. The cloning and characterization of the genes for the five naturally occurring monogenic obesity syndromes in the mouse have led to major breakthroughs in understanding the physiology of energy balance and the contribution of genetics to obesity in the human population. However, the regulation of energy balance is an extremely complex process, and it is quickly becoming clear that hundreds of genes are involved. In this article, we review the naturally occurring monogenic and polygenic obese mouse strains, as well as the large number of transgenic and knockout mouse models currently available for the study of obesity and energy balance. Reprinted by permission of the publisher. Reprinted by permission of the publisher.
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